

Sect 230 – App A Component Function IDs – Att 2: Sorted by Discipline, then Description Rev. 4, 8/16/04

The “Discipline” indicator represents the engineering discipline most commonly associated with the ID. This is included to aid ID selection, particularly in this Attachment which is sorted by discipline first; however, this discipline categorization does not preclude using the acronym for disciplines other than that indicated.

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
MISC	Miscellaneous (must get ESM Ch 1 POC approval)	ASME	All
SYS	System (the entire OPsystem or subsystem)	ASME	All
BLDG	Buildings; transportables	803.1	C/S/Arch
CTO	Crane, bridge	LANL	C/S/Arch
CTG	Crane, gantry	LANL	C/S/Arch
CJ	Crane, jib	LANL	C/S/Arch
CM	Crane, monorail	LANL	C/S/Arch
CS	Crane, shop	LANL	C/S/Arch
DR	Door	803.1	C/S/Arch
DAC	Door, air curtain	LANL	C/S/Arch
DM	Door, motorized	LANL	C/S/Arch
DRE	Door, roll-up, electric	LANL	C/S/Arch
DRH	Door, roll-up, hydraulic	LANL	C/S/Arch
DRM	Door, roll-up, manual	LANL	C/S/Arch
DW	Dumbwaiter	Y14.38	C/S/Arch
EE	Elevator, electric	LANL	C/S/Arch
EH	Elevator, hydraulic	LANL	C/S/Arch
FEN	Fence	LANL	C/S/Arch
GE	Gate, electric	LANL	C/S/Arch
GH	Gate, hydraulic	LANL	C/S/Arch
HE	Hoist, electric	LANL	C/S/Arch
HM	Hoist, manual	LANL	C/S/Arch
HP	Hoist, pneumatic	LANL	C/S/Arch
IMM	Ice maker machine	LANL	C/S/Arch
LADR	Ladder	803	C/S/Arch
SLS	Lift station, sewage	LANL	C/S/Arch
LWI	Lift, wheelchair, inclined	LANL	C/S/Arch
LWV	Lift, wheelchair, vertical	LANL	C/S/Arch
SMF	Main, force, sewage	LANL	C/S/Arch
MHE	Manhole, electric	LANL	C/S/Arch
MHS	Manhole, steam	LANL	C/S/Arch
MWW	Manhole, waste water	LANL	C/S/Arch
RGNG	Rigging (slings, shackles, etc)	Y14.38	C/S/Arch
RPP	Road & park lots, paved	LANL	C/S/Arch
RUP	Road & park lots, unpaved	LANL	C/S/Arch
RBE	Road-block, electric	LANL	C/S/Arch
RBH	Road-block, hydraulic	LANL	C/S/Arch
RS	Roof section	LANL	C/S/Arch
ES	Stack, exhaust	LANL	C/S/Arch
TTT	Turntable	LANL	C/S/Arch
WGS	Weir gate, sludge	LANL	C/S/Arch
WW	Wig-wag	LANL	C/S/Arch

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
52	Circuit Breaker, AC	803.1	EI Util Dwgs
7	Circuit Breaker, Anode	803.1	EI Util Dwgs
72	Circuit Breaker, DC	803.1	EI Util Dwgs
22	Circuit Breaker, Equalizer	803.1	EI Util Dwgs
41	Circuit Breaker, Field	803.1	EI Util Dwgs
42	Circuit Breaker, Running	803.1	EI Util Dwgs
6	Circuit Breaker, Starting	803.1	EI Util Dwgs
93	Contactor, Field Changing	803.1	EI Util Dwgs
29	Contactor, Isolating	803.1	EI Util Dwgs
73	Contactor, Load-Resistor	803.1	EI Util Dwgs
4	Contactor, Master	803.1	EI Util Dwgs
19	Contactor, Starting-To-Running Transition	803.1	EI Util Dwgs
69	Control Device, Permissive	803.1	EI Util Dwgs
28	Detector, Flame	803.1	EI Util Dwgs
18A	Device, Accelerating	803.1	EI Util Dwgs
26	Device, Apparatus Thermal	803.1	EI Util Dwgs
38	Device, Bearing Protective	803.1	EI Util Dwgs
35	Device, Brush-Operating or Slip-Ring Short Circuiting	803.1	EI Util Dwgs
8	Device, Control Power Disconnecting	803.1	EI Util Dwgs
18D	Device, Decelerating	803.1	EI Util Dwgs
43	Device, Manual Trans/Select	803.1	EI Util Dwgs
34	Device, Master Sequence	803.1	EI Util Dwgs
66	Device, Notching or Jogging	803.1	EI Util Dwgs
12	Device, Overspeed	803.1	EI Util Dwgs
36	Device, Polarity or Polarizing Voltage	803.1	EI Util Dwgs
9	Device, Reversing	803.1	EI Util Dwgs
31	Device, Separate Excitation	803.1	EI Util Dwgs
57	Device, Short-Circuiting or Grounding	803.1	EI Util Dwgs
15	Device, Speed or Frequency Matching	803.1	EI Util Dwgs
5	Device, Stopping	803.1	EI Util Dwgs
13	Device, Synchronous Speed	803.1	EI Util Dwgs
23	Device, Temperature Control	803.1	EI Util Dwgs
14	Device, Underspeed	803.1	EI Util Dwgs
88	Generator, Auxiliary Motor or Motor	803.1	EI Util Dwgs
65	Governor	803.1	EI Util Dwgs
1	Master Element	803.1	EI Util Dwgs
75	Mechanism, Position Changing	803.1	EI Util Dwgs
45	Monitor, Atmospheric Condition	803.1	EI Util Dwgs
39	Monitor, Mechanical, Condition	803.1	EI Util Dwgs
84	Operating Mechanism	803.1	EI Util Dwgs
90	Regulating Device	803.1	EI Util Dwgs
67	Relay, AC Directional Overcurrent	803.1	EI Util Dwgs

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ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
79	Relay, AC Reclosing	803.1	EI Util Dwgs
51	Relay, AC Time Overcurrent	803.1	EI Util Dwgs
74	Relay, Alarm	803.1	EI Util Dwgs
30	Relay, Annunciator	803.1	EI Util Dwgs
83	Relay, Automatic Selective Control or Transfer	803.1	EI Util Dwgs
68	Relay, Blocking	803.1	EI Util Dwgs
85	Relay, Carrier/Pilot-Wire Receiver	803.1	EI Util Dwgs
3	Relay, Checking or Interlocking	803.1	EI Util Dwgs
61	Relay, Current Balance	803.1	EI Util Dwgs
76	Relay, DC Overcurrent	803.1	EI Util Dwgs
82	Relay, DC Reclosing	803.1	EI Util Dwgs
87	Relay, Differential Protective	803.1	EI Util Dwgs
32	Relay, Directional Power	803.1	EI Util Dwgs
21	Relay, Distance	803.1	EI Util Dwgs
53	Relay, Exciter or DC Generator	803.1	EI Util Dwgs
40	Relay, Field	803.1	EI Util Dwgs
56	Relay, Field Application	803.1	EI Util Dwgs
81	Relay, Frequency	803.1	EI Util Dwgs
64	Relay, Ground Detector (Not CT Secondary)	803.1	EI Util Dwgs
48	Relay, Incomplete Sequence	803.1	EI Util Dwgs
50	Relay, Instantaneous Overcurrent (OC)	803.1	EI Util Dwgs
86	Relay, Locking-Out	803.1	EI Util Dwgs
49	Relay, Machine or Transformer Thermal	803.1	EI Util Dwgs
78	Relay, Out-of-Step Protective Phase-Angle Measuring	803.1	EI Util Dwgs
59	Relay, Overvoltage	803.1	EI Util Dwgs
95	Relay, Phase Discordance Handling Unit	803.1	EI Util Dwgs
46	Relay, Phase-Balance Current or Reverse-Phase	803.1	EI Util Dwgs
47	Relay, Phase-Sequence Voltage	803.1	EI Util Dwgs
55	Relay, Power Factor	803.1	EI Util Dwgs
58	Relay, Rectifier Failure	803.1	EI Util Dwgs
24	Relay, Static Breaker Failure	803.1	EI Util Dwgs
2	Relay, Time-Delay Starting or Closing	803.1	EI Util Dwgs
62	Relay, Time-Delay Starting or Closing	803.1	EI Util Dwgs
94	Relay, Tripping	803.1	EI Util Dwgs
37	Relay, Undercurrent or Underpower	803.1	EI Util Dwgs
27	Relay, Undervoltage	803.1	EI Util Dwgs
44	Relay, Unit Sequence Starting	803.1	EI Util Dwgs

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
92	Relay, Voltage and Power Directional	803.1	EI Util Dwgs
91	Relay, Voltage Directional	803.1	EI Util Dwgs
60	Relay, Voltage or Current Balance	803.1	EI Util Dwgs
70	Rheostat	803.1	EI Util Dwgs
80	Switch, Flow	803.1	EI Util Dwgs
71	Switch, Level	803.1	EI Util Dwgs
89	Switch, Line	803.1	EI Util Dwgs
33	Switch, Position	803.1	EI Util Dwgs
63	Switch, Pressure	803.1	EI Util Dwgs
17	Switch, Shunting or Discharge	803.1	EI Util Dwgs
10	Switch, Unit Sequence	803.1	EI Util Dwgs
25	Synchronizing or Synchronism-Check Drive	803.1	EI Util Dwgs
77	Transmitter, Pulse	803.1	EI Util Dwgs
20	Valve, Electrically Operated	803.1	EI Util Dwgs
BB	Battery, banked	LANL	Elec
DB	Bus duct (aboveground)	LANL	Elec
SSBU	Bus, substation (HV)	803.1	Elec
CAP	Capacitor, non-pad mounted	803	Elec
CPMD	Capacitor, pad mounted	LANL	Elec
CB	Charger, battery	LANL	Elec
CBA	Circuit breaker, air (MV or HV)	LANL	Elec
CBG	Circuit breaker, gas (MV or HV)	LANL	Elec
LVPCB	Circuit breaker, low voltage	1015	Elec
CBO	Circuit breaker, oil (MV or HV)	LANL	Elec
CBV	Circuit breaker, vacuum (MV or HV)	LANL	Elec
CEO	Circuit, electric, overhead	LANL	Elec
CEU	Circuit, electric, underground	LANL	Elec
CDD	Disconnect, circuit	LANL	Elec
DHO	Disconnect, hand-operated	LANL	Elec
DMO	Disconnect, motor operated	LANL	Elec
VFD	Drive, variable frequency	LANL	Elec
EXC	Exciter	803	Elec
EXC	Exciter, generator	LANL	Elec
GDE	Generator, diesel engine	LANL	Elec
MG	Generator, motor	803.1	Elec
GNE	Generator, natural gas engine	LANL	Elec
PMG	Generator, permanent magnet	803.1	Elec
GNS	Generator, steam driven	LANL	Elec
LTE	Light, emergency	LANL	Elec
LTNT	Light, exit, non-tritium	LANL	Elec
LTET	Light, exit, tritium	LANL	Elec
LSS	Light, street	LANL	Elec
LF	Lighting fixtures	803.1	Elec

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ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
LN	Lighting, incandescent	LANL	Elec
LPT	Lightning protection	LANL	Elec
MO	Motor	803.1	Elec
MCC	Motor control center	803.1	Elec
EP	Panel, emergency power	LANL	Elec
LP	Panel, lighting	100	Elec
PP	Panel, power	100	Elec
PPDC	Panel, power, direct current	LANL	Elec
PSD	Phase shifting device	803.1	Elec
PE	Pole, electrical distribution	LANL	Elec
PDU	Power distribution unit	1100	Elec
RECT	Rectifier	803.1	Elec
RV	Regulator, voltage	LANL	Elec
PR	Relay, protective	LANL	Elec
MSTR	Starter, motor	803.1	Elec
SUB	Substation (HV)	LANL	Elec
SUS	Substation, unit, secondary	LANL	Elec
SPM	Switch, pad mounted	LANL	Elec
ATS	Switch, transfer, automatic	1100	Elec
MTS	Switch, transfer, manual	100	Elec
ST	Switch, transformer	LANL	Elec
SV	Switch, vacuum	LANL	Elec
SWBD	Switchboard (NEMA)	100	Elec
SWGR	Switchgear (ANSI)	803.1	Elec
XFMR	Transformer (LV)	803.1	Elec
XFRD	Transformer, distribution (MV)	LANL	Elec
XFRP	Transformer, power (HV)	LANL	Elec
XFRR	Transformer, rectifier	LANL	Elec
UPS	Uninterruptible power supply	1100	Elec
LET	Line, electric, transmission	LANL	Elec Util
TLA	Tower, electric, PNM LA	LANL	Elec Util
TMP	Tower, electric, PNM MP	LANL	Elec Util
TNL	Tower, electric, PNM NL	LANL	Elec Util
TTE	Tower, electric, PNM TE	LANL	Elec Util
AFD	Actuator, fire device	LANL	Fire Prot
FCPB	Battery, fire control panel	LANL	Fire Prot
PBX	Box, pull	803.1	Fire Prot
FCP	Control panel, fire	170	Fire Prot
HCP	Control panel, halon	170	Fire Prot
DF	Damper, fire	LANL	Fire Prot
DS	Damper, smoke	LANL	Fire Prot
HD	Detector, heat	LANL	Fire Prot
SMD	Detector, smoke	LANL	Fire Prot
FDE	Door, fire, electrical	LANL	Fire Prot
FD	Door, fire, mechanical	LANL	Fire Prot
FDC	Door, fire, structural	LANL	Fire Prot
FDC@	Fire Dept Connection	170mod	Fire Prot
EXT	Extinguisher, fire	LANL	Fire Prot
EXS	Extinguishing system, gaseous or halon	LANL	Fire Prot
HYD	Hydrant	803.1	Fire Prot
NAA	Notification Appliance, audio	LANL	Fire Prot
NAAV	Notification Appliance,	LANL	Fire Prot

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
	audio/visual		
NAV	Notification Appliance, visual	LANL	Fire Prot
PFP	Pump, fire protection	LANL	Fire Prot
SRNK	Sprinkler (head)	803.1	Fire Prot
SPF	Sprinkler, anti-freeze	LANL	Fire Prot
SPD	Sprinkler, dry pipe	LANL	Fire Prot
SPA	Sprinkler, preaction	LANL	Fire Prot
SPW	Sprinkler, wet pipe	LANL	Fire Prot
SPH	Standpipe	LANL	Fire Prot
OSY	Valve, outside screw & yoke	Y14.38	Fire Prot
PIV	Valve, post indicating	LANL	Fire Prot
PIVA	Valve, post indicating, annunciated	LANL	Fire Prot
RLT	Alarm, access, red-light	LANL	I&C
AA	Alarm, analyzer	5.1	I&C
ALC	Alarm, carbon monoxide	LANL	I&C
AGA	Alarm, combustible gas	LANL	I&C
CA@	Alarm, conductivity	5.1mod	I&C
IA	Alarm, current	5.1	I&C
PDA	Alarm, differential pressure	5.1	I&C
FA	Alarm, flow	5.1	I&C
LA	Alarm, level	5.1	I&C
MA	Alarm, moisture	5.1	I&C
OIA	Alarm, oxygen, indicating	5.1	I&C
JA	Alarm, power	5.1	I&C
PA	Alarm, pressure	5.1	I&C
RA	Alarm, radiation	5.1	I&C
XA	Alarm, special	5.1	I&C
SA	Alarm, speed	5.1	I&C
TA	Alarm, temperature	5.1	I&C
VA	Alarm, vibration	5.1	I&C
EA	Alarm, voltage	5.1	I&C
ZA	Alarm, zone or position	5.1	I&C
OI	Analyzer, oxygen	5.1	I&C
CPU	Central processing unit (computer)	803.1	I&C
ACO	Control operator, analyzer	803.1	I&C
CCO	Control operator, conductivity	803.1	I&C
PDCO	Control operator, differential pressure	803.1	I&C
FCO	Control operator, flow	803.1	I&C
HCO	Control operator, hand	803.1	I&C
LCO	Control operator, level	803.1	I&C
PCO	Control operator, pressure	803.1	I&C
XCO	Control operator, special	803.1	I&C
SCO	Control operator, speed	803.1	I&C
TCO	Control operator, temperature	803.1	I&C
AIK	Control station, indicating, analyzer	5.1	I&C
BIK	Control station, indicating, burner	5.1	I&C

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ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
CIK	Control station, indicating, conductivity	5.1	I&C
IIK	Control station, indicating, current	5.1	I&C
PDIK	Control station, indicating, differential pressure	5.1	I&C
FIK	Control station, indicating, flow	5.1	I&C
MIK	Control station, indicating, moisture	5.1	I&C
JIK	Control station, indicating, power	5.1	I&C
XIK	Control station, indicating, special	5.1	I&C
SIK	Control station, indicating, speed	5.1	I&C
TIK	Control station, indicating, temperature	5.1	I&C
EIK	Control station, indicating, voltage	5.1	I&C
ARK	Control station, recording, analyzer	5.1	I&C
CRK	Control station, recording, conductivity	5.1	I&C
PDRK	Control station, recording, differential pressure	5.1	I&C
FRK	Control station, recording, flow	5.1	I&C
LRK	Control station, recording, level	5.1	I&C
XRK	Control station, recording, special	5.1	I&C
TRK	Control station, recording, temperature	5.1	I&C
AC	Control, analyzer	5.1	I&C
BC	Control, burner	5.1	I&C
CC	Control, conductivity	5.1	I&C
IC	Control, current	5.1	I&C
ZDC	Control, deviation	5.1	I&C
PDC	Control, differential pressure	5.1	I&C
TDC	Control, differential temperature	5.1	I&C
FC@	Control, flow	5.1mod	I&C
FFC	Control, flow, ratio	5.1	I&C
WDC	Control, force differential	5.1	I&C
HC	Control, hand	5.1	I&C
AIC	Control, indicating, analyzer	5.1	I&C
BIC	Control, indicating, burner	5.1	I&C
CIC	Control, indicating, conductivity	5.1	I&C
IIC	Control, indicating, current	5.1	I&C
ZDIC	Control, indicating, deviation	5.1	I&C
PDIC	Control, indicating, differential pressure	5.1	I&C
TDIC	Control, indicating, temperature	5.1	I&C

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
	differential temperature		
FIC	Control, indicating, flow	5.1	I&C
FFIC	Control, indicating, flow ratio	5.1	I&C
FQIC	Control, indicating, flow, quantity	5.1	I&C
WDIC	Control, indicating, force differential	5.1	I&C
HIC	Control, indicating, hand	5.1	I&C
LIC	Control, indicating, level	5.1	I&C
MIC	Control, indicating, moisture	5.1	I&C
JIC	Control, indicating, power	5.1	I&C
YIC	Control, indicating, presence or state	5.1	I&C
PIC	Control, indicating, pressure	5.1	I&C
QIC	Control, indicating, quantity	5.1	I&C
RIC	Control, indicating, radiation	5.1	I&C
XIC	Control, indicating, special	5.1	I&C
SIC	Control, indicating, speed	5.1	I&C
TIC	Control, indicating, temperature	5.1	I&C
KIC	Control, indicating, time	5.1	I&C
EIC	Control, indicating, voltage	5.1	I&C
WIC	Control, indicating, weight or force	5.1	I&C
ZIC	Control, indicating, zone or position	5.1	I&C
LC	Control, level	5.1	I&C
MC@	Control, moisture	5.1mod	I&C
JC	Control, power	5.1	I&C
YC	Control, presence or state	5.1	I&C
PC@	Control, pressure	5.1mod	I&C
RC	Control, radiation	5.1	I&C
ARC	Control, recording, analyzer	5.1	I&C
BRC	Control, recording, burner	5.1	I&C
CRC	Control, recording, conductivity	5.1	I&C
IRC	Control, recording, current	5.1	I&C
ZDRC	Control, recording, deviation	5.1	I&C
PDRC	Control, recording, differential pressure	5.1	I&C
TDRC	Control, recording, differential temperature	5.1	I&C
FRC	Control, recording, flow	5.1	I&C
FQRC	Control, recording, flow, quantity	5.1	I&C
FFRC	Control, recording, flow, ratio	5.1	I&C
WDRC	Control, recording, force differential	5.1	I&C
LRC	Control, recording, level	5.1	I&C
MRC	Control, recording, moisture	5.1	I&C
ZRC	Control, recording, position	5.1	I&C
JRC	Control, recording, power	5.1	I&C
PRC	Control, recording, pressure	5.1	I&C
QRC	Control, recording, quantity	5.1	I&C

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ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
RRC	Control, recording, radiation	5.1	I&C
XRC	Control, recording, special	5.1	I&C
SRC	Control, recording, speed	5.1	I&C
TRC@	Control, recording, temperature	5.1mod	I&C
KRC	Control, recording, time	5.1	I&C
ERC	Control, recording, voltage	5.1	I&C
WRC	Control, recording, weight or force	5.1	I&C
XC	Control, special	5.1	I&C
SC	Control, speed	5.1	I&C
TC@	Control, temperature	5.1mod	I&C
KC	Control, time	5.1	I&C
EC	Control, voltage	5.1	I&C
WC	Control, weight or force	5.1	I&C
ZC	Control, zone or position	5.1	I&C
CP	Controller, pneumatic	LANL	I&C
CPF	Controller, pneumatic, flow	LANL	I&C
PLC	Controller, programmable logic	Y14.38	I&C
RE	Detector, radiation	5.1	I&C
ESS	Equipment, surveillance	LANL	I&C
AV	Final element, analyzer	5.1	I&C
BZ	Final element, burner	5.1	I&C
IZ	Final element, current	5.1	I&C
ZDV	Final element, deviation	5.1	I&C
PDV	Final element, differential pressure	5.1	I&C
TDV	Final element, differential temperature	5.1	I&C
FQV	Final element, flow, quantity	5.1	I&C
FV	Final element, flow, rate	5.1	I&C
FFV	Final element, flow, ratio	5.1	I&C
WDZ	Final element, force differential	5.1	I&C
HV@	Final element, hand	5.1mod	I&C
LV	Final element, level	5.1	I&C
UV	Final element, multivariable	5.1	I&C
ZV	Final element, position	5.1	I&C
JV	Final element, power	5.1	I&C
YZ	Final element, presence or state	5.1	I&C
PV@	Final element, pressure	5.1mod	I&C
QZ	Final element, quantity	5.1	I&C
RZ	Final element, radiation	5.1	I&C
SV@	Final element, speed	5.1mod	I&C
TV@	Final element, temperature	5.1mod	I&C
KV@	Final element, time	5.1mod	I&C
VZ	Final element, vibration analysis	5.1	I&C
EZ	Final element, voltage	5.1	I&C
WZ	Final element, weight or force	5.1	I&C
AI	Indicator, analyzer	5.1	I&C

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
BI	Indicator, burner	5.1	I&C
CI	Indicator, conductivity	5.1	I&C
II	Indicator, current	5.1	I&C
ZDI	Indicator, deviation	5.1	I&C
PDI	Indicator, differential pressure	5.1	I&C
TDI	Indicator, differential temperature	5.1	I&C
FI	Indicator, flow	5.1	I&C
FFI	Indicator, flow, ratio	5.1	I&C
FQI	Indicator, flow, totalized	5.1	I&C
WDI	Indicator, force differential	5.1	I&C
GI	Indicator, ground	5.1	I&C
LI	Indicator, level	5.1	I&C
MI	Indicator, moisture	5.1	I&C
UI	Indicator, multivariable	5.1	I&C
JI	Indicator, power	5.1	I&C
YI	Indicator, presence or state	5.1	I&C
PI	Indicator, pressure	5.1	I&C
QI	Indicator, quantity	5.1	I&C
RI	Indicator, radiation	5.1	I&C
XI	Indicator, special	5.1	I&C
SI	Indicator, speed	5.1	I&C
TI	Indicator, temperature	5.1	I&C
KI	Indicator, time	5.1	I&C
KQI	Indicator, time, totalized	5.1	I&C
VI	Indicator, vibration	5.1	I&C
EI	Indicator, voltage	5.1	I&C
WI	Indicator, weight or force	5.1	I&C
ZI	Indicator, zone or position	5.1	I&C
LIL	Interlock, laser	LANL	I&C
MTR	Meter	803.1	I&C
MHT	Meter, humidity or temperature	LANL	I&C
MW	Meter, water	LANL	I&C
AM	Modifier, analyzer	5.1	I&C
CM@	Modifier, conductivity	5.1mod	I&C
IM	Modifier, current	5.1	I&C
PDM	Modifier, differential pressure	5.1	I&C
TDM	Modifier, differential temperature	5.1	I&C
FM	Modifier, flow	5.1	I&C
FFM	Modifier, flow, ratio	5.1	I&C
FQM	Modifier, flow, totalizer	5.1	I&C
PIM	Modifier, indicating, pressure	5.1	I&C
LM	Modifier, level	5.1	I&C
MM@	Modifier, moisture	5.1mod	I&C
JM	Modifier, power	5.1	I&C
PM	Modifier, pressure	5.1	I&C
RM	Modifier, radiation	5.1	I&C
XM	Modifier, special	5.1	I&C
SM	Modifier, speed	5.1	I&C

Sect 230 – App A Component Function IDs – Att 2: Sorted by Discipline, then Description Rev. 4, 8/16/04

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
TM	Modifier, temperature	5.1	I&C
VM@	Modifier, vibration	5.1mod	I&C
EM	Modifier, voltage	5.1	I&C
WM	Modifier, weight or force	5.1	I&C
ZM	Modifier, zone or position	5.1	I&C
CAM	Monitor, continuous air	LANL	I&C
CPL	Panel, control	LANL	I&C
JX	Power supply, electric	5.1	I&C
AE	Primary element, analyzer	5.1	I&C
BE	Primary element, burner	5.1	I&C
CE	Primary element, conductivity	5.1	I&C
IE	Primary element, current	5.1	I&C
ZDE	Primary element, deviation	5.1	I&C
PDE	Primary element, differential pressure	5.1	I&C
FE@	Primary element, flow	5.1mod	I&C
FQE	Primary element, flow, quantity	5.1	I&C
WDE	Primary element, force differential	5.1	I&C
LE	Primary element, level	5.1	I&C
ME	Primary element, moisture	5.1	I&C
PHE	Primary element, pH	5.1	I&C
JE	Primary element, power	5.1	I&C
PE@	Primary element, pressure	5.1mod	I&C
QE	Primary element, quantity	5.1	I&C
SESE	Primary element, seismic	5.1	I&C
XE	Primary element, special	5.1	I&C
SE	Primary element, speed	5.1	I&C
TE	Primary element, temperature	5.1	I&C
KE	Primary element, time	5.1	I&C
VE	Primary element, vibration	5.1	I&C
EE@	Primary element, voltage	5.1mod	I&C
WRE	Primary element, wear	5.1	I&C
WE	Primary element, weight or force	5.1	I&C
ZE	Primary element, zone or position	5.1	I&C
RDR	Reader	803.1	I&C
AR	Recorder, analyzer	5.1	I&C
BR	Recorder, burner	5.1	I&C
CR@	Recorder, conductivity	5.1mod	I&C
IR	Recorder, current	5.1	I&C
ZDR	Recorder, deviation	5.1	I&C
PDR	Recorder, differential pressure	5.1	I&C
TDR	Recorder, differential temperature	5.1	I&C
FR	Recorder, flow	5.1	I&C
FFR	Recorder, flow, ratio	5.1	I&C
FQR	Recorder, flow, totalized	5.1	I&C
WDR	Recorder, force differential	5.1	I&C

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
AIR	Recorder, indicating, analyzer	5.1	I&C
LR	Recorder, level	5.1	I&C
MR	Recorder, moisture	5.1	I&C
UR	Recorder, multivariable	5.1	I&C
ZR	Recorder, position	5.1	I&C
JR	Recorder, power	5.1	I&C
JQR	Recorder, power, totalizing (incl watt-hr mtr)	5.1	I&C
YR	Recorder, presence or state	5.1	I&C
PR@	Recorder, pressure	5.1mod	I&C
QR	Recorder, quantity	5.1	I&C
RR	Recorder, radiation	5.1	I&C
SESR	Recorder, seismic	5.1	I&C
XR	Recorder, special	5.1	I&C
SR	Recorder, speed	5.1	I&C
TR	Recorder, temperature	5.1	I&C
KR	Recorder, time	5.1	I&C
VR	Recorder, vibration	5.1	I&C
ER	Recorder, voltage	5.1	I&C
WR	Recorder, weight or force	5.1	I&C
AY	Relay, analyzer	5.1	I&C
BY	Relay, burner	5.1	I&C
IY	Relay, current	5.1	I&C
ZDY	Relay, deviation	5.1	I&C
PDY	Relay, differential pressure	5.1	I&C
TDY	Relay, differential temperature	5.1	I&C
FQY	Relay, flow, quantity	5.1	I&C
FY	Relay, flow, rate	5.1	I&C
WDY	Relay, force differential	5.1	I&C
LY	Relay, level	5.1	I&C
UY	Relay, multivariable	5.1	I&C
ZY	Relay, position	5.1	I&C
JY	Relay, power	5.1	I&C
YY	Relay, presence or state	5.1	I&C
PY	Relay, pressure	5.1	I&C
QY	Relay, quantity	5.1	I&C
RY	Relay, radiation	5.1	I&C
SY	Relay, speed	5.1	I&C
TY	Relay, temperature	5.1	I&C
KY	Relay, time	5.1	I&C
VY	Relay, vibration analysis	5.1	I&C
EY	Relay, voltage	5.1	I&C
WY	Relay, weight or force	5.1	I&C
RTU	Remote terminal unit	LANL	I&C
BG	Sight glass, burner	5.1	I&C
FG	Sight glass, flow	5.1	I&C
LG	Sight glass, level	5.1	I&C
S	Siren	LANL	I&C
AS	Switch, analyzer	5.1	I&C
ASH	Switch, analyzer, high	5.1	I&C
ASHL	Switch, analyzer, high or low	5.1	I&C
ASL	Switch, analyzer, low	5.1	I&C

Sect 230 – App A Component Function IDs – Att 2: Sorted by Discipline, then Description Rev. 4, 8/16/04

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
BSH	Switch, burner, high	5.1	I&C
BSHL	Switch, burner, high low	5.1	I&C
BSL	Switch, burner, low	5.1	I&C
CS@	Switch, conductivity	5.1mod	I&C
IS	Switch, current	5.1	I&C
ISH	Switch, current, high	5.1	I&C
ISHL	Switch, current, high or low	5.1	I&C
ISL	Switch, current, low	5.1	I&C
ZDSH	Switch, deviation, high	5.1	I&C
ZDSL	Switch, deviation, low	5.1	I&C
PDS	Switch, differential pressure	5.1	I&C
PDSH	Switch, differential pressure, high	5.1	I&C
PDSL	Switch, differential pressure, low	5.1	I&C
TDS	Switch, differential temperature	5.1	I&C
TDSH	Switch, differential temperature, high	5.1	I&C
TDSL	Switch, differential temperature, low	5.1	I&C
FS@	Switch, flow	5.1mod	I&C
FSH	Switch, flow, high	5.1	I&C
FSHL	Switch, flow, high or low	5.1	I&C
FSL	Switch, flow, low	5.1	I&C
FQSH	Switch, flow, quantity, high	5.1	I&C
FQSL	Switch, flow, quantity, low	5.1	I&C
FFS	Switch, flow, ratio	5.1	I&C
FFSH	Switch, flow, ratio, high	5.1	I&C
FFSL	Switch, flow, ratio, low	5.1	I&C
FQS	Switch, flow, totalized	5.1	I&C
WDSH	Switch, force differential, high	5.1	I&C
WDSL	Switch, force differential, low	5.1	I&C
HS	Switch, hand	5.1	I&C
AIS	Switch, indicating, analyzer	5.1	I&C
CIS	Switch, indicating, conductivity	5.1	I&C
IIS	Switch, indicating, current	5.1	I&C
PDIS	Switch, indicating, differential pressure	5.1	I&C
FIS	Switch, indicating, flow	5.1	I&C
HIS	Switch, indicating, hand	5.1	I&C
LIS	Switch, indicating, level	5.1	I&C
MIS	Switch, indicating, moisture	5.1	I&C
PIS	Switch, indicating, pressure	5.1	I&C
RIS	Switch, indicating, radiation	5.1	I&C
XIS	Switch, indicating, special	5.1	I&C
SIS	Switch, indicating, speed	5.1	I&C
TIS	Switch, indicating, temperature	5.1	I&C
KIS	Switch, indicating, time	5.1	I&C
FQIS	Switch, indicating, totalizing, flow	5.1	I&C

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
VIS	Switch, indicating, vibration	5.1	I&C
EIS	Switch, indicating, voltage	5.1	I&C
WIS	Switch, indicating, weight or force	5.1	I&C
ZIS	Switch, indicating, zone or position	5.1	I&C
LS	Switch, level	5.1	I&C
LSH	Switch, level, high	5.1	I&C
LSHL	Switch, level, high or low	5.1	I&C
LSL	Switch, level, low	5.1	I&C
ZS	Switch, limit, zone or position	5.1	I&C
MS@	Switch, moisture	5.1mod	I&C
ZSH	Switch, position, high	5.1	I&C
ZSHL	Switch, position, high or low	5.1	I&C
ZSL	Switch, position, low	5.1	I&C
JS	Switch, power	5.1	I&C
JSH	Switch, power, high	5.1	I&C
JSHL	Switch, power, high or low	5.1	I&C
JSL	Switch, power, low	5.1	I&C
YSH	Switch, presence or state, high	5.1	I&C
YSL	Switch, presence or state, low	5.1	I&C
PS@	Switch, pressure	5.1mod	I&C
PSH	Switch, pressure, high	5.1	I&C
PSHL	Switch, pressure, high or low	5.1	I&C
PSL	Switch, pressure, low	5.1	I&C
QSH	Switch, quantity, high	5.1	I&C
QSHL	Switch, quantity, high or low	5.1	I&C
QSL	Switch, quantity, low	5.1	I&C
RSH	Switch, radiation, high	5.1	I&C
RSHL	Switch, radiation, high or low	5.1	I&C
RSL	Switch, radiation, low	5.1	I&C
TRS@	Switch, recording, temperature	5.1mod	I&C
SS	Switch, speed	5.1	I&C
SSH	Switch, speed, high	5.1	I&C
SSHL	Switch, speed, high or low	5.1	I&C
SSL	Switch, speed, low	5.1	I&C
TS@	Switch, temperature	5.1mod	I&C
TSH	Switch, temperature, high	5.1	I&C
TSHL	Switch, temperature, high or low	5.1	I&C
TSL	Switch, temperature, low	5.1	I&C
KSH	Switch, time, high	5.1	I&C
KSHL	Switch, time, high or low	5.1	I&C
KSL	Switch, time, low	5.1	I&C
KS	Switch, timer	5.1	I&C
AITs	Switch, transmitting, indicating, analyzer	5.1	I&C
VS	Switch, vibration	5.1	I&C

Sect 230 – App A Component Function IDs – Att 2: Sorted by Discipline, then Description Rev. 4, 8/16/04

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
VSH	Switch, vibration, high	5.1	I&C
VSHL	Switch, vibration, high or low	5.1	I&C
VSL	Switch, vibration, low	5.1	I&C
ESH	Switch, voltage, high	5.1	I&C
ESHL	Switch, voltage, high or low	5.1	I&C
ESL	Switch, voltage, low	5.1	I&C
WSH	Switch, weight or force, high	5.1	I&C
WSHL	Switch, weight or force, high or low	5.1	I&C
WSL	Switch, weight or force, low	5.1	I&C
SYN	Synchroscope	803.1	I&C
AP	Test point, analyzer	5.1	I&C
BP	Test point, burner	5.1	I&C
FP	Test point, flow	5.1	I&C
PP@	Test point, pressure	5.1mod	I&C
TP	Test point, temperature	5.1	I&C
TH	Thermostat	803.1	I&C
IQ	Totalizer, current	5.1	I&C
FQ	Totalizer, flow	5.1	I&C
JWHQ	Totalizer, power, watt-hour	5.1	I&C
KQ	Totalizer, time	5.1	I&C
EQ	Totalizer, voltage	5.1	I&C
AT	Transmitter, analyzer	5.1	I&C
BT	Transmitter, burner	5.1	I&C
CT	Transmitter, conductivity	5.1	I&C
IT	Transmitter, current	5.1	I&C
ZDT	Transmitter, deviation	5.1	I&C
PDT	Transmitter, differential pressure	5.1	I&C
TDT	Transmitter, differential temperature	5.1	I&C
FT	Transmitter, flow	5.1	I&C
FFT	Transmitter, flow, ratio	5.1	I&C
FQT	Transmitter, flow, totalizer	5.1	I&C
WDT	Transmitter, force differential	5.1	I&C
AIT	Transmitter, indicating, analyzer	5.1	I&C
BIT	Transmitter, indicating, burner	5.1	I&C
CIT	Transmitter, indicating, conductivity	5.1	I&C
IIT	Transmitter, indicating, current	5.1	I&C
ZDIT	Transmitter, indicating, deviation	5.1	I&C
PDIT	Transmitter, indicating, differential pressure	5.1	I&C
TDIT	Transmitter, indicating, differential temperature	5.1	I&C
FIT	Transmitter, indicating, flow	5.1	I&C
FQIT	Transmitter, indicating, flow, quantity	5.1	I&C
WDIT	Transmitter, indicating, force differential	5.1	I&C

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
LIT	Transmitter, indicating, level	5.1	I&C
MIT	Transmitter, indicating, moisture	5.1	I&C
ZIT	Transmitter, indicating, position	5.1	I&C
JIT	Transmitter, indicating, power	5.1	I&C
PIT	Transmitter, indicating, pressure	5.1	I&C
QIT	Transmitter, indicating, quantity	5.1	I&C
RIT	Transmitter, indicating, radiation	5.1	I&C
XIT	Transmitter, indicating, special	5.1	I&C
SIT	Transmitter, indicating, speed	5.1	I&C
TIT	Transmitter, indicating, temperature	5.1	I&C
KIT	Transmitter, indicating, time	5.1	I&C
VIT	Transmitter, indicating, vibration	5.1	I&C
EIT	Transmitter, indicating, voltage	5.1	I&C
WIT	Transmitter, indicating, weight or force	5.1	I&C
LT	Transmitter, level	5.1	I&C
MT	Transmitter, moisture	5.1	I&C
JT	Transmitter, power	5.1	I&C
JWHT	Transmitter, power, watt-hour	5.1	I&C
YT	Transmitter, presence or state	5.1	I&C
PT	Transmitter, pressure	5.1	I&C
QT	Transmitter, quantity	5.1	I&C
RT	Transmitter, radiation	5.1	I&C
ART	Transmitter, recording, analyzer	5.1	I&C
BRT	Transmitter, recording, burner	5.1	I&C
IRT	Transmitter, recording, current	5.1	I&C
ZDRT	Transmitter, recording, deviation	5.1	I&C
PDRT	Transmitter, recording, differential pressure	5.1	I&C
TDRT	Transmitter, recording, differential temperature	5.1	I&C
FRT	Transmitter, recording, flow	5.1	I&C
WDRT	Transmitter, recording, force differential	5.1	I&C
LRT	Transmitter, recording, level	5.1	I&C
ZRT	Transmitter, recording, position	5.1	I&C
JRT	Transmitter, recording,	5.1	I&C

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ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
	power		
PRT	Transmitter, recording, pressure	5.1	I&C
QRT	Transmitter, recording, quantity	5.1	I&C
RRT	Transmitter, recording, radiation	5.1	I&C
SRT	Transmitter, recording, speed	5.1	I&C
TRT	Transmitter, recording, temperature	5.1	I&C
KRT	Transmitter, recording, time	5.1	I&C
VRT	Transmitter, recording, vibration analysis	5.1	I&C
ERT	Transmitter, recording, voltage	5.1	I&C
WRT	Transmitter, recording, weight or force	5.1	I&C
XT	Transmitter, special	5.1	I&C
ST@	Transmitter, speed	5.1mod	I&C
TT	Transmitter, temperature	5.1	I&C
KT	Transmitter, time	5.1	I&C
KQT	Transmitter, time, totalized	5.1	I&C
VT	Transmitter, vibration	5.1	I&C
ET	Transmitter, voltage	5.1	I&C
WT	Transmitter, weight or force	5.1	I&C
ZT	Transmitter, zone or position	5.1	I&C
XRAY	Unit, security, x-ray	803.1	I&C
AW	Well, analyzer	5.1	I&C
BW	Well, burner	5.1	I&C
LW	Well, level	5.1	I&C
RW	Well, radiation	5.1	I&C
TW	Well, thermal (thermowell)	5.1	I&C
EG	Electro corrector, gas	LANL	M&TE
TSTEQ	Equipment, Test (only when no specific applies)	ASME	M&TE
LDC	Load cell	803.1	M&TE
AMP	Meter, ammeter	LANL	M&TE
MMO	Meter, megohm	LANL	M&TE
MMD	Meter, multimeter, digital	LANL	M&TE
MPH	Meter, pH	LANL	M&TE
TQS	Screwdriver, torque	LANL	M&TE
CBT	Test set, relay, overload, and or circuit breaker	LANL	M&TE
GX	Tester, balance	LANL	M&TE
GXT	Tester, gas	LANL	M&TE
TQT	Tester, torque	LANL	M&TE
CRT	Tube, cathode ray	803.1	M&TE
TQW	Wrench, torque	LANL	M&TE
ACTR	Actuator	ASME	Mech
ACL	After cooler	LANL	Mech
AGT	Agitator	803.1	Mech
ACR	Air conditioner, refrigerant	LANL	Mech
ASE	Air sampler, exhaust stack	LANL	Mech

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
AES	Air-ejector, steam	LANL	Mech
BFP	Backflow preventer	803.1	Mech
BL	Blower	LANL	Mech
BV	Blower, vacuum	LANL	Mech
BHW	Boiler, hot water	LANL	Mech
BS	Boiler, steam	LANL	Mech
BWS	Boiler, water supply	LANL	Mech
NGN	Bottle, nitrogen	LANL	Mech
DBX	Box, drop	LANL	Mech
GB	Box, glove	LANL	Mech
CWA	Chiller, water, absorption	LANL	Mech
CWE	Chiller, water, evaporative	LANL	Mech
CWR	Chiller, water, refrigerant	LANL	Mech
CCL	Coil, cooling	803.1	Mech
CCE	Coil, cooling, evaporative	LANL	Mech
CCG	Coil, cooling, glycol	LANL	Mech
HCL	Coil, heating	803.1	Mech
CW	Column, water	LANL	Mech
CA	Compressor, air	LANL	Mech
CR	Compressor, refrigerant	LANL	Mech
CRA	Condenser, refrigerant, air-cooled	LANL	Mech
CRE	Condenser, refrigerant, evaporative	LANL	Mech
CTE	Condenser, turbine exhaust	LANL	Mech
CVVR	Conveyor	803.1	Mech
CAE	Cooler, air, evaporative	LANL	Mech
CAW	Cooler, air, water	LANL	Mech
WCR	Cooler, water	Y14.38	Mech
DMP	Damper	803.1	Mech
DHM	Dehumidifier	LANL	Mech
DMN	Demineralizer	LANL	Mech
DSH	Desuperheater	LANL	Mech
DAB	Diffuser, aeration basin	LANL	Mech
MDS	Disinfection system, mixed-oxidant	LANL	Mech
DRN	Drain	803.1	Mech
DFL	Drive, fluid	LANL	Mech
DAD	Dryer, air, desiccant	LANL	Mech
DAR	Dryer, air, refrigerant	LANL	Mech
DUCT	Duct	803.1	Mech
ENG	Engine	803.1	Mech
EW	Eyewash	LANL	Mech
FAN	Fan	803.1	Mech
FB	Fan, booster	LANL	Mech
FC	Fan, circulating	LANL	Mech
FCD	Fan, condenser	LANL	Mech
FCT	Fan, cooling tower	LANL	Mech
FE	Fan, exhaust	LANL	Mech
FRA	Fan, return, air	LANL	Mech
FS	Fan, supply	LANL	Mech
FLT	Filter (water etc.)	803.1	Mech
FAB	Filter, air, bag or box	LANL	Mech
FAL	Filter, air, charcoal	LANL	Mech

Sect 230 – App A Component Function IDs – Att 2: Sorted by Discipline, then Description Rev. 4, 8/16/04

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
FAC	Filter, air, cleanable	LANL	Mech
FES	Filter, air, electrostatic	LANL	Mech
FAF	Filter, air, fire	LANL	Mech
FAH	Filter, air, HEPA	LANL	Mech
FAM	Filter, air, mat	LANL	Mech
FAP	Filter, air, pad	LANL	Mech
FAX	Filter, air, rigid flow	LANL	Mech
FAR	Filter, air, roughing	LANL	Mech
FO	Filter, oil	LANL	Mech
FRL	Filter, roll	LANL	Mech
FH	Fume hood	LANL	Mech
FEH	Fume hood, exhaust	LANL	Mech
FGF	Furnace, gas fired	LANL	Mech
GRBX	Gearbox	ASME	Mech
HX	Heat exchanger	803.1	Mech
HXG	Heat exchanger, glycol	LANL	Mech
HXO	Heat exchanger, oil	LANL	Mech
HXR	Heat exchanger, refrigerant	LANL	Mech
HXS	Heat exchanger, steam	LANL	Mech
HXW	Heat exchanger, water	LANL	Mech
HUE	Heater unit, air, electric	LANL	Mech
HUG	Heater unit, air, gas	LANL	Mech
HUI	Heater unit, air, infrared	LANL	Mech
HUS	Heater unit, air, steam	LANL	Mech
HSE	Heater unit, air, steam-electric	LANL	Mech
HUW	Heater unit, air, water	LANL	Mech
HDA	Heater, deaerating	LANL	Mech
HDG	Heater, duct, gas	LANL	Mech
HFH	Heater, feed water, high-pressure	LANL	Mech
HFI	Heater, feed water, intermediate-pressure	LANL	Mech
HFL	Heater, feed water, low-pressure	LANL	Mech
HWE	Heater, water, electric	LANL	Mech
HWG	Heater, water, gas	LANL	Mech
HWS	Heater, water, steam	LANL	Mech
HV	Heating, ventilation unit	LANL	Mech
HVA	Heating, ventilation, air conditioning unit	LANL	Mech
PSX	Hose	LANL	Mech
HAS	Humidifier, air, steam	LANL	Mech
HAW	Humidifier, air, water	LANL	Mech
LB	Isolator, level	803.1	Mech
JCP	Jet, condenser, priming	LANL	Mech
LUV	Light, ultraviolet (e.g., sterilization)	LANL	Mech
MACH	Machine	ASME	Mech
MANF	Manifold	ASME	Mech
MGD	Meter, gas, district	LANL	Mech
MGR	Meter, gas, revenue	LANL	Mech
MC	Mixer, chemical	LANL	Mech
OPG	Orifice plate, gas	LANL	Mech

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
OVEN	Oven	LANL	Mech
HPU	Power unit, hydraulic	LANL	Mech
P	Pump	803.1	Mech
PAC	Pump, acid or chemical	LANL	Mech
PBF	Pump, boiler feed	LANL	Mech
PCW	Pump, chilled or cooling water	LANL	Mech
PCR	Pump, circulating	LANL	Mech
PC	Pump, condensate	LANL	Mech
PCT	Pump, cooling tower	LANL	Mech
PDW	Pump, deionized water	LANL	Mech
PFO	Pump, fuel oil	LANL	Mech
PG	Pump, glycol	LANL	Mech
PHW	Pump, hot water	LANL	Mech
PDH	Pump, hot water, domestic (potable)	LANL	Mech
PHO	Pump, hydraulic	LANL	Mech
PO	Pump, oil	LANL	Mech
PPB	Pump, pressure, boosting	LANL	Mech
PSA	Pump, sampler air	LANL	Mech
PSW	Pump, sealant water	LANL	Mech
PSR	Pump, sewage, raw	LANL	Mech
PS	Pump, sump	LANL	Mech
PTW	Pump, tempered water	LANL	Mech
PV	Pump, vacuum	LANL	Mech
PWT	Pump, waste treatment	LANL	Mech
PWS	Pump, water spray	LANL	Mech
RUA	Refrigeration unit, air	LANL	Mech
REG	Regulator, gas bottle	LANL	Mech
DGRS	Regulator, gas, district	LANL	Mech
NGRS	Regulator, natural gas	LANL	Mech
RPG	Regulator, pressure, gas	LANL	Mech
RPW	Regulator, pressure, water	LANL	Mech
ROU	Reverse osmosis unit	803.1	Mech
RPD	Rupture disc	803.1	Mech
PSE	Safety device, pressure	5.1	Mech
TSE	Safety device, temperature	5.1	Mech
SB	Screen, bar, mechanical	LANL	Mech
SF	Scrubber, fume	LANL	Mech
SCBA	Self Contained Breathing Apparatus	LANL	Mech
SEP	Separator	803.1	Mech
SO	Separator, oil	LANL	Mech
SHS	Shower, safety	LANL	Mech
SNK	Sink	803.1	Mech
SLW	Slinger, water spray	LANL	Mech
SCR	Strainer	LANL	Mech
TBL	Table	LANL	Mech
TK	Tank	803.1	Mech
TAC	Tank, acid or chemical	LANL	Mech
TCI	Tank, chemical injection	LANL	Mech
TCA	Tank, compressed air	LANL	Mech
TCF	Tank, condensate, flash	LANL	Mech
TCS	Tank, condensate, steam	LANL	Mech

Sect 230 – App A Component Function IDs – Att 2: Sorted by Discipline, then Description Rev. 4, 8/16/04

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
TCW	Tank, condensate, water	LANL	Mech
TX	Tank, expansion	LANL	Mech
TG	Tank, glycol	LANL	Mech
THP	Tank, hydraulic pressure	LANL	Mech
TO	Tank, oil	LANL	Mech
TPWS	Tank, potable water, storage	LANL	Mech
TRC	Tank, refrigerant	LANL	Mech
TRS	Tank, retention or storage	LANL	Mech
TSA	Tank, separator, air	LANL	Mech
TV	Tank, vacuum	LANL	Mech
TWT	Tank, waste treatment	LANL	Mech
TWC	Tank, water, chilled or cooling	LANL	Mech
TWD	Tank, water, deionized or demineralized	LANL	Mech
TWH	Tank, water, hot	LANL	Mech
TWS	Tank, water, sealant	LANL	Mech
TC	Tower, cooling	LANL	Mech
GT	Trap, grease	LANL	Mech
TS	Trap, steam	LANL	Mech
TSD	Turbine, steam driven	LANL	Mech
V	Valve	803.1	Mech
AOBV	Valve, ball, air-operated	LANL	Mech
BVT	Valve, ball, trunion	LANL	Mech
VB	Valve, block	LANL	Mech
VBH	Valve, block, hydrant	LANL	Mech
VBW	Valve, block, water	LANL	Mech
VBG	Valve, burner, gas	LANL	Mech
VBO	Valve, burner, oil	LANL	Mech
VC	Valve, check	LANL	Mech
ZDCV	Valve, control, deviation	5.1	Mech
PDCV	Valve, control, differential pressure	5.1	Mech
TDCV	Valve, control, differential temperature	5.1	Mech
FCV	Valve, control, flow	5.1	Mech
WCV	Valve, control, force	5.1	Mech
WDCV	Valve, control, force differential	5.1	Mech
FICV	Valve, control, indicating, flow	5.1	Mech
LCV	Valve, control, level	5.1	Mech
PCV	Valve, control, pressure	5.1	Mech
SCV	Valve, control, speed	5.1	Mech
TCV	Valve, control, temperature	5.1	Mech
KCV	Valve, control, timed	5.1	Mech
ZCV	Valve, control, zone or position	5.1	Mech
VABG	Valve, gate, aeration basin	LANL	Mech
VEQG	Valve, gate, equalization basin	LANL	Mech
KV	Valve, key, natural gas	LANL	Mech
MS	Valve, main steam	LANL	Mech
VM	Valve, motor-operated	LANL	Mech

ID	Description <--Sort 2	Ref*	Discipline (typical)* ->Sort 1<-
VPR	Valve, pressure reducing	LANL	Mech
RVS	Valve, regulator, steam	LANL	Mech
PRV	Valve, relief, pressure (liquid service)	LANL	Mech
PSV	Valve, safety, pressure (steam-air-gas service)	5.1	Mech
SOV	Valve, solenoid	LANL	Mech
VAV	Variable Air Volume box	LANL	Mech
VP	Vessel, pressure	LANL	Mech
WA	Washer, air	LANL	Mech
DWS	Water softener	LANL	Mech
DNZ	Water unit, deionized	LANL	Mech
FRKLFT	Forklift	LANL	Mobile Eq
LME	Lift, materials, electric	LANL	Mobile Eq
LMH	Lift, materials, hydraulic	LANL	Mobile Eq
LMM	Lift, materials, mobile	LANL	Mobile Eq
LMP	Lift, materials, pneumatic	LANL	Mobile Eq
LPE	Lift, personnel, electric	LANL	Mobile Eq
LPG	Lift, personnel, gasoline	LANL	Mobile Eq
LPH	Lift, personnel, hydraulic	LANL	Mobile Eq
LPP	Lift, personnel, pneumatic	LANL	Mobile Eq
LEP	Lift, platform, electric	LANL	Mobile Eq
LDR	Loader, front	LANL	Mobile Eq
TEL	Telephone	803.1	Other
TELE	Television	803.1	Other
CD	Collector, dust	LANL	Shop
CRANE	Crane, tires/motor	LANL	Shop
HVYEQ	Equipment, Heavy	LANL	Shop
GRB	Grinder, belt	LANL	Shop
GRP	Grinder, pedestal	LANL	Shop
GRS	Grinder, surface	LANL	Shop
LAT	Lathe	LANL	Shop
LMF	Lock, metal former	LANL	Shop
MNC	Mill, numeric control	LANL	Shop
MM	Milling machine	LANL	Shop
DP	Press, drill	LANL	Shop
PH	Press, hydraulic	LANL	Shop
RMF	Roller, metal forming	LANL	Shop
SBL	Sand blaster	LANL	Shop
SD	Sander	LANL	Shop
SAW	Saw	LANL	Shop
SG	Shaker, graphite	LANL	Shop
SMC	Shear, metal cutting	LANL	Shop
TOILET	Toilet	LANL	Shop
TOOL	Tools and tooling	LANL	Shop
TRCTR	Tractor	LANL	Shop
TRLR	Trailer	ASME	Shop
TRUCK	Truck	LANL	Shop
EWM	Welder, electric	LANL	Shop

M&TE = Measuring & Test Equip

*** References (sources):**

ASME Y14.38-1999
IEEE Std 803.1-1992
IEEE Std 1015-1997
IEEE Std 1100-1999
ISA 5.1-1992 (modified with @ suffix when noted)
LANL historical
NECA 100-1999
NFPA 170-1999

The “Discipline” indicator represents the engineering discipline most commonly associated with the ID. This is included to aid ID selection, particularly in Attachment 2 which is sorted by discipline first; however, this discipline categorization does not preclude using the acronym for disciplines other than that indicated.